



# NR&D

## The Niobrara Starting Lineup

Basketball season has begun and NR&D has six modules that create a powerful team for you or your customers. The Niobrara R&D starting lineup is a team of role players ready to support your communication needs.

### 1 - Point Guard: EPE5-T(ST) Great passer

The EPE5 is a very proficient distributor of messages. The EPE5-T is equipped with a 10BaseT Ethernet port and four RS-422/485 serial ports, while the EPE5-ST has a 10BaseT Ethernet port and four RS-232 serial ports.

The EPE5-T replaces the EPE5-TCP and the EPE5-TCP-A. The EPE5-ST is a new release for the EPE5 family that has RS-232 serial ports instead of RS-422/485. The EPE5 family of products has several new features previously unavailable:

- An Ethernet I/O scanner table with 128 entries.
  - The termination and bias of the serial ports is now configurable.
  - The backplane interface is now 16-bits wide.
  - Module configuration can be written to EEPROM "on-the-fly" or to FLASH when in download mode.
- Read more online at [www.niobrara.com/html/epe5\\_cut.html](http://www.niobrara.com/html/epe5_cut.html)

### 2 - Shooting Guard: CNOE-211 Accurate Shooter, Quick

The CNOE-211 offers what no one else can: an Ethernet option module for Schneider Automation's TSX Compact. It is the only module to take advantage of the Compact Ethernet communication channel. Anyone familiar with Niobrara's products should note that the CNOE-211 uses Niobrara's Routing and Protocol Conversion (RPC) firmware. RPC firmware turns MUCM, CUCM, and QUCM modules into powerful routers much like Niobrara's MEB and EPE5 modules. The CNOE is unique among Compact PLC modules since it appears to the PLC as an option module instead of an intelligent I/O card. Read more online at [www.niobrara.com/cutsheets/cnoe\\_211\\_cut.pdf](http://www.niobrara.com/cutsheets/cnoe_211_cut.pdf)

### 3 - Off Guard: MUCM+103 Dependable, Versatile

If you are looking for a dependable and versatile module, look no further. The TSX Momentum Universal Communications Module (MUCM) is a programmable serial communications module for Schneider Automation's Momentum PLC. The MUCM is a Momentum specialty base that interfaces with Momentum Communication Adapters and Processors and supports Momentum Option Adapters. The MUCM is a powerful module that can be used in a variety of applications. Read more online at [www.niobrara.com/cutsheets/mucm\\_cs.pdf](http://www.niobrara.com/cutsheets/mucm_cs.pdf)



## 4 - Power Forward: QUCM Powerful, Adaptable

Niobrara's Quantum Universal Communications Modules (QUCM-O & QUCM-OE) are programmable serial communication modules for Schneider Automation's Quantum™ PLC with two serial ports, a PLC interface, a LED array, a real-time clock, a TCP/IP stack, two application areas, and internal registers. The QUCM-OE offers an additional Ethernet port. The QUCM comes from the factory with the Routing and Protocol Conversion (RPC) application which supports all of the important Schneider North American serial protocols: Modbus RTU or ASCII, master or slave; SY/MAX Point-to-Point or Net-to-Net; Plogic, PNIM and RNIM (master or slave); Dual Modbus & RNIM master (drop Modbus devices on RNIM radio networks); Dual Modbus & SY/MAX slave.

Read more at [www.niobrara.com/cutsheets/qucm\\_cs.pdf](http://www.niobrara.com/cutsheets/qucm_cs.pdf)

## 5 - Center: MEB-RT Big, Strong, Foundation

The MEB is a fully functional, bidirectional Modbus Plus™ to Ethernet bridge. Devices on either network can access devices on the other network. This network traffic can be programming commands as well as I/O and register data. In addition, the MEB-RT can act as:

- Data Concentrator
- Ethernet NIM
- Ethernet Gateway or MUX
- Ethernet Protocol Converter
- Modbus Plus Gateway - Modbus (RTU or ASCII, Master or Slave)

Read more at [www.niobrara.com/cutsheets/meb\\_cs.pdf](http://www.niobrara.com/cutsheets/meb_cs.pdf)

**No team is complete without a Super Substitute**

## 6 – 6th Man: SERM-T Best Substitute Around

The Niobrara R&D SERM module is a SY/MAX® Ethernet Rack Master. It replaces the CPU or RI interface in a SY/MAX® local or remote rack and maps its I/O to Modbus / TCP. The SERM can then be controlled via Ethernet from another PLC or SCADA. Upgrading from SY/MAX to Unity or Concept is now as simple as adding entries to the Quantum's (or Premium or M340 or Compact or Momentum) Ethernet I/O Scanner for each SERM controlled rack. The SERMs powerful internal register mapper may be configured using a standard web browser or included PC software.

Read more at [www.niobrara.com/cutsheets/serm\\_cs.pdf](http://www.niobrara.com/cutsheets/serm_cs.pdf)

## Niobrara Quantity Discounts

Quantity discounts are available on Niobrara R&D Products

| Order Quantity | Discount |
|----------------|----------|
| 10 – 24        | 5%       |
| 25 – 49        | 10%      |
| 50 – 99        | 15%      |
| 100+           | 20%      |

\*Discounts apply to individual part numbers. Delivery must be taken within one year of purchase.

**Niobrara R&D Corporation**  
**[www.niobrara.com](http://www.niobrara.com)**

## ***Important Contact Information***

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### **Holiday Office Hours:**

Our office will be closed for the following holidays: December 25th (Christmas), January 1st (New Year's), January 2nd (Founder's Day)

### **Niobrara Research & Development Corporation**

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All current literature, price list, and software are available for download at...

[www.niobrara.com](http://www.niobrara.com)

For additional literature requests, call or email...

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## ***Niobrara Trivia***

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### **Who is the President of Niobrara R&D?**

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Email [newsletter@niobrara.com](mailto:newsletter@niobrara.com) with your answer and contact information.

Three correct responses will be drawn at random and receive a prize.

### **October Trivia Winners**

Last month we only had two correct answers to the trivia question. Our apologies to the two that did answer correctly, because your emails were lost. If you could please forward your emails again we will be happy to get your prizes will be mailed out immediately.

Thank you to everyone that submitted an answer. Be sure to answer this month's question. You can't win if you don't play.

